

Coaching Thinking Through the Use of Small Groups

This chapter proposes that one of the best ways to coach critical thinking—and to promote the kind of productive talk that leads to thoughtful and elaborated writing—is a goal-directed use of small groups. The suggestions in this chapter represent only one of many ways to use small groups in the classroom. To use MacGregor's (1990) metaphor for the collaborative learning movement—an "arbor of vines growing in parallel, crossing and intertwining" (p. 29)—the approach taken in this chapter is only one of many vines that comprise the collaborative learning movement. In tracing the origins of these vines, MacGregor identifies and describes at least six different root systems: the experiential learning practices of Dewey, Piaget, and Vygotsky; the "cooperative learning" movement associated with David Johnson and Roger Johnson at the University of Minnesota and Robert Slavin of Johns Hopkins University; the learning community movement, in which teachers, often working together in interdisciplinary teams, become colearners with students in pursuing a complex, many-faceted, multidisciplinary problem; the various disciplinary approaches to small groups, such as Kenneth Bruffee's work in rhetoric and composition or Uri Treisman's work with study groups in mathematics; such problem-centered approaches as Harvard's case method; and the influence of various grant-funded networks of individuals and institutions interested in collaborative approaches to education.

The particular approach to collaborative learning taken in this chapter represents an integration of Hillocks's "environmental

mode" of teaching (1986, pp. 113–131), Bruffee's methods of collaborative learning using "consensus groups" (1983, 1984, 1993), and various studies of small group interaction (including D. W. Johnson and F. P. Johnson, 1991). Teachers who already use small groups will have undoubtedly developed methods and approaches somewhat different from those I describe here. However, other teachers may not have tried small groups, preferring to use class time for lecturing, leading whole-class discussions, or conducting other activities that involve the whole class rather than autonomous small groups. My goal in this chapter is to suggest small groups as another strategy for these teachers to consider. The method I describe here might best be characterized as a goal-oriented use of small groups aimed at giving students supervised practice in disciplinary thinking under the tutelage of the teacher as coach. This method has a consistent rhythm: the teacher presents a disciplinary problem requiring critical thinking; students work together in small groups to seek a consensus solution to the problem; and the teacher coaches students' performance by observing their process and critiquing their solutions.

According to Bruffee (1993, pp. 24–25), the pedagogical effectiveness of this method was demonstrated in the late 1950s by Abercrombie's research in educating medical students at University Hospital in London. Abercrombie (1960) found that her students learned diagnostic skills more powerfully if they were placed in independent groups to address a diagnostic problem. The use of small groups did not lead simply to a pooling of knowledge, as if each student held one piece of the solution. Rather, collaborative learning promoted argumentation and consensus building: each student had to support a hypothesis with reasons and evidence in an attempt to sway the others. The improved thinking grew out of the practice of formulating hypotheses, arguing for their adequacy, and seeking a reasoned consensus that all group members could support.

The methods used by Abercrombie in medical training can be extended to classrooms in any discipline. By presenting small groups with critical thinking problems to wrestle with, teachers can create an environment of productive talk that leads to greatly enriched inquiry, analysis, and argument. The goal of each task is not to have small groups come up with the "right answer" but to come up with reasonable, supported answers that they will be asked to defend later in front of the whole class. On occasion, these answers will surprise the teacher with their sophistication and cogency; in my own field of literature, I often find my view of a novel or a poem reshaped by the arguments of my students. Truly, the purported expert can become a colearner in such a setting.

There are several advantages of this goal-directed way of using small groups. First, this approach is particularly effective at helping students learn teacher-specified thinking strategies. Hillocks (1986) and Hillocks, Kahn, and Johannessen (1983) have shown that having students work independently in small groups on purposefully designed and sequenced tasks (what these researchers call the "environmental mode" of teaching) produces significantly higher levels of thinking—as measured by the degree of precision and elaboration in written arguments—than the lecture method, whole-class discussion methods, or nondirective group work.

A second advantage is that the method described here can be adapted to large classes, even in lecture halls where students have to turn around in their seats to form groups. Whereas it is nearly impossible to lead a whole-class discussion in a room of two hundred students, it is entirely possible in a large class to give students a critical thinking task, have students work with their neighbors for ten minutes or so, and then ask representative groups to present and justify their solutions. I have personally made extensive use of small groups in classes of seventy-five students (students sat in five-person groups in a large open room), and I have observed group work conducted in large lecture halls.

Finally, this method can be easily integrated with other teaching strategies. A teacher might lecture for several days, then switch to a day or so of using small group sessions, and then switch again to whole-class discussions or other activities. Or any given day might include a variety of strategies, one of which is a small group session.

Sequence of Activities for Using Small Groups During a Class Period

To work a small group activity smoothly into a class period, teachers might consider the following approach, which combines a small group session with a subsequent plenary session.

Designing the Task

A good small group task, like a good writing assignment, needs to be carefully designed. Good tasks present open-ended critical thinking problems that require solutions justified with supporting arguments. Typical tasks ask students to reach consensus on a solution to a disciplinary problem; when consensus is impossible, students can also "agree to disagree," in which case final group reports will include majority and minority views with clarifying explanations of the causes of disagreement.

Many disciplinary problems can be used interchangeably either as small group tasks or as formal or informal writing assignments (for a heuristic for designing tasks, see Chapter Seven). Small group tasks can also be used in conjunction with a formal writing assignment to help students brainstorm ideas for an upcoming essay, discover and rehearse arguments, or critique rough drafts. In these cases, the small group tasks promote exploration of ideas needed for the essay. In all cases, a good small group task promotes controversy, has a product, can be accomplished in the specified time limit, and is directed toward a learning goal for the course. Further discussion of the design of small group tasks occurs later in this chapter.

Assigning the Task

If possible, the task should be given to students in a handout or on an overhead projector. The task should specify the question or problem to be addressed, the time limit, and the final product. Times specified can be anywhere from a few minutes to a full class hour; however, if teachers want to integrate a complete cycle of activities into a fifty-minute class, they typically limit the small group activity to fifteen to twenty minutes, thereby allowing time for group reporting and critiquing in a plenary session. To keep conversations focused and on task, groups should always be responsible for creating a product—usually a written product such as a thesis statement, list of pros and cons, idea map, outline of an argument, or group-composed paragraph but sometimes an alternative project such as a drawing or a group presentation. The point here is that conversations are generally more focused, elaborated, and sustained when each group has to “go public” with a product. For example, “As a group, discuss your reaction to Plato’s *Crito*” is not as effective a task assignment as this:



As a group, propose a list of significant questions you would like to have the teacher address or the class discuss regarding Plato’s *Crito*. Your initial list (which you will hand in to the instructor) should include a dozen or so questions. Then reach consensus on what you consider your three best questions. Your recorder will write these questions on the board and will explain to the class why your group considers them pertinent, interesting, and significant questions raised by *Crito*. Time: 15 minutes.

Teachers might consider collecting and critiquing the written products during the first weeks of class as a way of signaling the importance they attach to group work.

Completing the Task

Once students understand the task, the teacher lets the students work on the problem independently. Some teachers believe it is best to leave the room entirely and not to return until it is time for the plenary session. This strategy signals to students their autonomy from the instructor and their responsibility for forming their own knowledge communities. Other teachers like to wander from group to group as a resource person or eavesdrop from a corner of the room. What often surprises teachers is the amount of noise generated by the groups. My own experience suggests that despite the noise, it is best to keep all groups in the classroom rather than to allow some to go into the hall or into separate rooms. The loud hum in the room actually stimulates participation and draws groups close together into tight circles.

Group Reporting

When the allotted time is up, recorders from each group report their group's solution to the class as a whole. (In large classes, the teacher usually asks only a representative sample of groups to report.) Although teachers vary in how they ask students to report, what works best for me is to insist on formal reports from groups: the recorder has to stand and present the group's consensus in an impromptu speech, thus practicing the kind of speaking skills that will be demanded on the job after college. The reports are not supposed to be "summaries of what the group talked about"—like minutes of a meeting—but actual persuasive presentations of each group's consensus solution. By putting pressure on recorders to make effective public speeches, I know the recorders will put pressure on groups to stay on task.

Group Critiquing and Plenary Discussion

As groups report, the teacher begins to move back into the discussion, challenged now by the need to respond productively to group solutions, which are often confounding in their assortment of strong and weak ideas. Disagreement among the groups generally stimulates further discussion of the problem as the class, guided by the instructor, struggles toward a larger consensus. The instructor must help the class synthesize group reports by pointing out strengths and weaknesses while often praising and legitimizing views that are different from his or her own. The students are especially eager to hear the teacher's solution to the collaborative

task. In giving it, the teacher not only represents the expert views of the disciplinary community (or one of the expert views) but becomes a powerful role model for the kind of arguing strategies that the discipline uses and values. But the teacher is now more vulnerable, more at risk, than in a lecture setting. After working independently, students are more confident in their own views. They become less passive, more active in raising questions, more challenging as audiences. For me, the class discussions that follow small group work are among the most stimulating, challenging, and satisfying of my all teaching experiences.

Relating the Task to the Learning Sequence

The best small group tasks are clearly related to some ongoing purpose that the teacher should make plain to students. Perhaps the task prepares students for a lecture that follows or focuses attention on key points or controversies in material just covered. Or perhaps the task requires students to sum up and synthesize readings and lectures or to become engaged in a new problem about to be explored in the course. Frequently, also, the task may be integrated with an upcoming formal writing assignment and allows students to talk through their ideas prior to writing. Since many students expect teachers to lecture, they will better accept collaborative work as “serious learning” if the teacher explains how the task relates to course goals. (For an extended example of a history teacher who successfully integrates small group tasks, writing assignments, and lectures into a semester-long course design, see “Arguing and Debating: Breihan’s History Course” in Walvoord and McCarthy, 1990).

Typical Small Group Tasks

In my own approach to collaborative learning, I like to identify both a disciplinary content goal and a thinking or arguing goal for each task. Thus, for the *Crito* task described earlier, the teacher’s content goal is to stimulate careful reading of *Crito*, to engage students in independent discussion of the text, and to see if students raise the same kinds of questions that have intrigued generations of commentators. (They often do.) The thinking skills goal is to increase students’ ability to pose self-sponsored questions about a text.

I find that in designing collaborative tasks, I rely extensively on the following strategies.

1. The Problem-Posing Strategy

In this approach, the instructor gives students a disciplinary problem framed as an open-ended question to which students must propose and justify an answer. To keep students on task, I often ask groups to summarize their answers in one-sentence "thesis statements," which they write on the chalkboard. Recorders then present justifying arguments supporting the thesis when they make their reports. If groups cannot reach consensus, I ask for a majority thesis and at least one minority thesis.



We have examined four alternative approaches to the design of a digital data-recording device for Company X's portable heart defibrillator. Which solution should be chosen and why?

In what way, if any, is Jackson Pollack's *Autumn Rhythm* different from the results of a monkey throwing paint at a canvas?

According to Fullinwider, three theories are frequently used to defend preferential hiring for both African Americans and women: compensatory justice, social utility, and distributive justice. Using one or more of these theories, address this question: Is the legislature's proposed veterans preference law just?

Your author has quoted Peter Berger, an important American sociologist, to the effect that we are in "bondage" to society. Elsewhere that same author says, "In sum, society is the wall of our imprisonment in history." Your friend, I. M. Punker, rubs his hand through his orange hair, touches his nose ring, and says, "Nonsense. I am my own person, free to do whatever I want." Which of these two views does your group most agree with? Defend your choice with arguments.

2. The Frame Strategy

Using this strategy, the instructor gives students a mapping sentence that predicts the shape of a short essay but not the content. Students have to create content topic sentences to head each predicted section and develop a supporting argument for each one. Often the instructor can include in the task a blank tree diagram or an outline indicating the slots that students' ideas must fit. This task requires not only that students generate ideas but also that they place these ideas within a clear structure. (For further examples of frame questions, see Chapter Six, pages 115–116, and Chapter Seven, pages 126–127.)



Based on the data about the Pabst Brewing Company that you studied last night, what do you now think are the causes for this company's precipitous loss of market share? Place your solution into a frame that begins with the following sentence:

"There are X main causes for Pabst's loss of market share. First, [state the cause and support it] . . . Second, . . . Third, . . ." Continue with as many causes as your group determines.

Although Krauthammer's argument for rebuilding state mental institutions is persuasive in a number of ways, our group finds potential problems with his plan. First, . . . Second, . . . [Third, . . . Fourth, . . .]

3. The Question-Generating Strategy

This strategy is particularly effective for teaching the art of question asking in a discipline. After instruction in the kinds of questions asked by a particular discipline, the teacher breaks students into groups and has them brainstorm possible questions related to topics that he or she provides. After this phase, groups must then refine their lists into the two or three best questions and explain why each question is a particularly good one. (This is the strategy used in the earlier *Crito* example.)



Carefully observe this [poem, graph, statistical table, painting, advertisement]. What aspects of it puzzle you or intrigue you? As a group, pose three good questions that emerge from your observation of the item.

Now that you have studied the six levels of questions in Bloom's taxonomy, use the taxonomy to develop test questions about Chapter Six in your text. Ask at least two questions at each level of the taxonomy. Recorders should be prepared to explain why you think each question fits its respective level.

Scientists often pose research questions that have the following generic structure: "What is the effect of X on Y?" For example, "What is the effect of varying amounts of light on the growth of *Escherichia coli*?" or "What is the effect of an improved freshman advising system on students' retention rate between the freshman and sophomore years?" Using these examples as models, develop three good research questions that you could ask about each of the following topics: steroids, day-care centers, the human immunodeficiency virus, gangs.

4. The Believing and Doubting Strategy

The "believing and doubting game," coined by Elbow (1973, 1986), asks students first to enter imaginatively into the possible truth of any statement, arguing in its favor (the believing game) and then

to stand back from it, adopting a healthy skepticism (the doubting game). To use this strategy with small groups, the instructor gives students a controversial thesis and asks them to generate reasons and supporting arguments for and against the thesis. Angelo and Cross (1993, pp. 168–171) discuss a similar strategy using pro and con grids. (For further discussion of the believing and doubting game, see Chapter Seven, page 124, and Chapter Eight, pages 142–143.)



The overriding religious view expressed in *Hamlet* is an existential atheism similar to Sartre's.

Baccalaureate engineering programs should be extended to five years.

The eighty-three-year-old stroke victim described in the case study should be informed of her daughter's terminal cancer.

5. The Evidence-Finding Strategy

The instructor's goal here is to have students find facts, figures, and other data or evidence to support a premise. In my own discipline of literature, this task often means finding textual detail from a poem, novel, or play that might be used to support an argument. In other disciplines, it might mean using data from library, laboratory, or field research. Such tasks teach students how experts in a field use discipline-appropriate evidence to support assertions. (Note that this strategy is ineffective if it leads simply to students' thumbing through their books or lab notes during a collaborative session. I usually assign data-finding tasks several days in advance so that students can find the evidence as homework. Collaborative groups then work to sort, classify, and evaluate the evidence gathered in advance by participants.)



"Our design group recommends the choice of air bearings over conventional steel bearings for this application because air bearings will give better performance at a lower cost." Support this claim with the evidence needed to make it persuasive to both engineers and managers.

"Although Hamlet claims to be putting on an antic disposition, at several places in the play he goes over the line and seems to lapse into genuine madness." What places in the text could be used to support this assertion?

Your textbook describes typical kinds of problematic behaviors that children exhibit in kindergarten. You believe that a particularly unruly child—we'll call

him Martin—would benefit emotionally from repeating kindergarten next year rather than entering first grade. Martin's parents are adamantly opposed to holding Martin back. What evidence might you use to help Martin's parents appreciate your side of this issue?

Note that in working on an evidence-finding task, students usually discover what teachers already know: that the evidence is ambiguous and that a strong evidential case can often be made against the thesis as well as for it. Such ambiguity generally unsettles beginning college students, who expect the "experts" to know the right answer and who have not yet realized the extent to which arguers select and shape data to support a point. (See the discussion of Perry's developmental theory in Chapter Two.) Teachers need to help students confront and endure such ambiguity, confident that doing so helps them move higher on Perry's scale of intellectual growth.

6. The Case Strategy

Among the most popular ways to use small groups is to devise cases that require decision-making and justification. If a case involves different roles, each group can initially be assigned one or two of the roles and asked to devise the best arguments it can from the assigned perspectives. (For further discussion of cases and for an example, see Chapter Seven, pages 130–131.)

7. The Norming Session Strategy

This strategy, which is also discussed in Chapters Thirteen and Fifteen, helps students internalize the criteria by which the instructor will judge their formal essays. The instructor passes out three or four student essays from previous classes (with names removed) and lets students, in groups, rank the essays and develop arguments justifying their rankings. Later, in the plenary session, the instructor reveals his or her own rankings and initiates a general discussion of grading criteria for essays. Often teachers discover that students have erroneous notions about what teachers look for in a formal essay, particularly when they are learning the thinking processes and stylistic conventions of new disciplines. (See also Chapter Thirteen, page 219, and Chapter Fifteen, pages 259–262.) For an excellent illustration of how a sociology professor conducts a collaborative norming session (complete with examples of student essays on the topic of ethnocentrism), see Bateman (1990), pp. 110–116. For examples of norming sessions based on freshmen placement essays, see White (1973–1981, 1992).

8. The "Rough Draft Workshop" Strategy

Perhaps the most common use of small groups in writing courses is the "rough draft workshop," in which students read and respond to each other's work in progress. The goal of these workshops is to use peer review to stimulate global revision of drafts to improve ideas, organization, development, and sentence structure. (Chapter Thirteen, pages 222–225, gives detailed suggestions for using small groups for peer review.)

9. The Metacognitive Strategy

Another effective use of small groups, discussed in detail by Brufee (1993, p. 47), is to ask students to consider their own thinking and negotiating processes metacognitively. This strategy is especially useful when small groups produce solutions that strike you as off-base or just plain wrong. Our authoritarian impulse is to tell the groups that their answers are wrong and show them the right answer. Another approach, however, is to say instead that the class's solutions differ considerably from those of most experts in this field. A subsequent metacognitive task is to send students back into small groups to analyze the differences in reasoning processes between themselves and the experts. According to Brufee, "The task is to examine the process of consensus making itself. How did the class arrive at its consensus? How do the students suppose that the larger community arrived at a consensus so different from their own? In what ways do those two processes differ?" (p. 47). The effect of this approach, in my experience, is to deepen students' understanding of how knowledge is created: instead of accepting (and perhaps just memorizing) the "right answer" based on the teacher's authority, students struggle to understand the principles of inquiry, analysis, and problem solving used by the experts to arrive at their views. They consider an answer not only a product but also the result of a process of disciplinary conversation.

Making Small Groups Work

The substantial body of research on small group interaction and strategies for team building is too vast to be summarized here, but I can provide a few tips that may prove helpful in making small groups work.

What Is the Best Size for Groups?

Bruffee's review (1993, p. 32) of the research on small group dynamics indicates that the best size for classroom consensus groups is five students; six work almost as well. Groups larger than six are unwieldy and "dilute the experience" for participants. Groups of four tend to divide into pairs, and groups of three tend toward a pair and an outsider. In contrast to in-class consensus groups, long-range "working groups" (collaborating, say, to write a research report together) seem to function best when they are smaller—groups of three seem optimum. Smaller groups also work better for peer review sessions, in which dyads are often appropriate.

How Do You Form a Class into Groups?

If you use groups only occasionally, the standard method is to divide the number of persons in the class by the size of the groups you want and have students count off by that number. Then all the ones go to one part of the room, the twos to another part, and so on. An alternative, of course, is simply to have students form their own groups by moving their chairs from rows into small group circles. I rarely use this method, however, because group sizes tend to vary and because friends end up sitting together, leading to too much "insider" chit-chat. (When you have the class count off by numbers, friends usually get split up.) Although letting friends sit together may be helpful in a large class or on the first day of class, a formal method for establishing groups leads to more businesslike behavior.

When you use groups extensively, it is often a good idea to form permanent or semipermanent groups that can establish bonds among their members. You then need to consider the next question.

Should You Form Groups at Random or According to Some Distributive Scheme?

When forming permanent or semipermanent groups, some teachers like to ensure diversity—different learning styles, different aptitude or skill levels, different majors, different backgrounds, and so forth—so they wait to form permanent groups until they have gathered the appropriate data about their students. Others find that randomly formed groups work adequately. I personally tend toward randomly formed groups, except that I try to make them heterogenous by gender in order to avoid all-male or all-female

groups. I also mix non-native speakers in with the rest of the class so that they get as much practice as possible speaking English with native speakers.

What Roles Should Members Play?

Opinion is divided here, for there are numerous ways to organize small groups and assign roles (see D. W. Johnson and F. P. Johnson, 1991). My own preference is to have decentralized leadership by asking groups to select a recorder and a checker for each task, rotating the roles regularly. The recorder's job is to make the report to the plenary session; therefore, the recorder has to keep the group on task, directing the discussion toward the ideas he or she will need to make a good report. In essence, the recorder is both leader and secretary. A dominant person placed in that role has to be quiet in order to get the group's help and take notes; a shy, quiet person in that role has to give a formal presentation at the plenary session and so must practice speaking up during the discussion. The checker has only one role: to make sure that everyone contributes. If someone is not participating, the checker intervenes to urge that the person join the discussion.

How Do You Teach Groups to Work Well Together?

Students need some initial instruction on why you think group work is valuable, what benefits they can expect to get from group activity, and how they can best learn to work together. Much research has been done on ways to teach groups to work together (see Spear, 1988; Golub, 1988; Slavin, 1990; D. W. Johnson and F. P. Johnson, 1991; D. W. Johnson and R. T. Johnson, 1991; Johnson, Johnson, and Smith, 1991; Bruffee, 1993).

One approach is to give students tips on group interaction. I start by explaining Carl Rogers's theory of empathic listening (1961), which forbids person A from expressing disagreement with person B unless person A can accurately summarize person B's argument. I give students an exercise requiring careful listening, giving them practice in walking in someone else's shoes (Bean, 1986).

A teacher can also help students see how differences in learning style, gender, or ethnicity can explain some of the ways that various people behave in groups. For example, extroverts on the Myers-Briggs Type Indicator (MBTI) like to think through an issue by talking out their ideas with others and are therefore apt to be vocal and engaged in group discussions (Jensen and Di Tiberio,

1989). Introverts, in contrast, like to think privately about an issue before talking about it and are often uncomfortable arguing in groups, although they listen carefully and take in what everyone is saying. Teachers can thus point out that quiet people in groups are often listening more carefully and thinking more deeply than their body language might indicate. Such persons, the instructor could explain, often have much to say but will be reluctant to say it until they are ready or until the group gently encourages them to contribute. To take another example, Myers-Briggs "judgers" reach decisions rapidly and are often impatient with an indecisive group that talks a problem to death. In contrast, MBTI "perceivers" resist early closure and want to talk through all possible points of view on an issue before reaching a decision. When students understand such differences in learning styles, they become more tolerant of classmates' behaviors that would otherwise annoy them. (For further discussion of learning styles, see Chapter Three, pages 39–41.)

Other differences worth discussing involve gender and culture. The class might discuss how the socialization of males in American culture tends toward decision making based on abstract rigorously applied principles, whereas females tend to be more concerned with the interpersonal dimension of decision making (Belenky, Clinchy, Goldberger, and Tarule, 1986; Gilligan, 1982). At the cultural level, the teacher might explain that Americans often state their desires bluntly and assertively in ways that would seem rude in many Asian cultures, where the expression of desire would be masked in roundabout conversation.

Another approach for helping groups work well together is to explain to students the positive value of conflict. I explain that the creative dialectic of thesis-antithesis-synthesis works well only in an atmosphere of conflicting views. By showing students how conflict generates creative thinking, the teacher can help students welcome disagreements and see how a watered-down compromise that no one really likes is less valuable than a true synthesis that seems better than either of the original views.

To promote healthy conflict, the teacher can discuss "egothink" and "clonethink." One kind of group dysfunction (egothink) occurs when members simply express vociferously their own opinions without trying to reach a higher level of understanding. The converse phenomenon (clonethink) occurs when the group quickly agrees with the first expressed view and decides that its task is over. Effective groups need to monitor their discussions, trying to steer a middle road between egothink and clonethink.

In addition to giving tips about group interaction, teachers can help students work in groups by providing regular opportunities

for self-monitoring. At fairly regular intervals, groups need to shift their focus from the task at hand to an evaluation of their own group process (Morton, 1988). At the conclusion of a group task, for example, the instructor could ask students to freewrite their responses to a question such as this: "How well did your group work together on this task?" Then students could be asked to share their responses with the group. Students need opportunities to get problems and frustrations out on the table and talk through them.

Another self-monitoring strategy is to give students questionnaires that ask them to rate their own group skills in such areas as active listening, making contributions, encouraging others to speak, and keeping the conversation on task. D. W. Johnson and F. P. Johnson (1991) provide numerous examples of self-monitoring questionnaires for groups.

The Controversy over Using Small Groups: Objections and Responses

Of course, not all teachers are as enthusiastic about small group work as I am. Many teachers choose not to use small groups in the classroom for pragmatic, pedagogical, or philosophical reasons. Before closing out this chapter, I would like to respond briefly to some of the objections that my colleagues have raised against using small groups. My purpose is not to be polemical but simply to clarify some of the issues in ways that might help professors decide what role, if any, the use of small groups might play in their own teaching.

Using Small Groups Takes Minimal Teacher Preparation or Skill

Perhaps the most frequent objection made by my own colleagues is that using small groups seems like a lazy way of teaching requiring little out-of-class effort or in-class teaching skill. Compared with the time and scholarship needed to prepare a good lecture, the preparation time for small group work seems minimal: put the students in groups, ask them a question, leave the room, and *voilà*, you're an innovative teacher.

In response, I must acknowledge that small group teaching looks easy—in fact, its practitioners can sometimes be observed wandering the halls while their students are working in groups. However, as with other modes of instruction, there are well-prepared and ill-prepared users of small groups. The well-prepared teacher is hardly lazy: the use of small groups described here is a goal-directed form of teaching that places heavy emphasis on task

sequencing and overall course design. Planning a good small group task demands articulation of course goals, identification of a particular goal to be addressed in the task, design of the task, and placement of the task within a sequence of learning activities, many of which include lectures and other kinds of class discussions. Thus, the preparation time for using small groups can be extensive. In-class teaching skills come into play during group reports and plenary sessions, where the teacher integrates class discussion with short lectures that present the teacher's (or the discipline's) expert perspectives on the problem the groups have just addressed. For me, the whole-class discussions that follow a collaborative learning task are among my most intense, most productive, and most challenging experiences as a teacher and a learner. (For a discussion of how a peer observer should evaluate a course taught through collaborative learning, see Wiener, 1986.)

Small Group Work Reduces the Amount of Time Students Spend with the Teacher

Another objection to small groups is that it reduces classroom contact between student and professor. Students pay tuition to learn from professors, not sit in groups with the professor absent. At one workshop I shall never forget, a professor excoriated me: "Collaborative learning is unethical. I would be abdicating my professional responsibilities if I deprived students of time spent with me as teacher, especially when they are yet untrained to work independently." Behind this objection is the obvious fear that small groups leave the blind leading the blind.

In defense of small groups, however, I would argue that small group sessions are not really time away from the teacher (who has constructed the task and is observing behavior) any more than a scrimmage game at basketball practice is time away from the coach. Nor does collaborative learning let the blind lead the blind. A better metaphor might be novices practicing with novices under the tutelage of the teacher as coach. In any discipline, the progress of new learners ought to be measured, at least partly, by what they can do independently of the teacher when face to face with a new disciplinary problem requiring critical thinking. What we aim for is their ability, when confronting a new problem, to think and write like members of our discipline. What goal-directed small group work provides is supervised practice at these skills.

What distinguishes this process from the blind leading the blind is the teacher's systematic intervention. An essential feature of this approach to collaborative learning is the teacher's critique of the students' performances at the conclusion of a task. These

critiques start as conversations between the teacher and group recorders, who must present a sustained argument in response to the problem posed in the collaborative task. Soon the conversation expands to include the whole class. Disagreements between teacher and students promote genuine discourse because the students, emboldened by group support, are not simply passive note takers. The teacher must become a true rhetor, representing the discipline by bringing the best reasons to bear on the teacher's claims. In hearing the teacher's response, students have access not only to the teacher's thinking and knowledge but also to the way arguments are structured and elaborated in the discipline. And in arguing back, in differing from the teacher's views, students move toward becoming autonomous thinkers who can join the conversation of the discipline.

Collaborative Learning Is Based on Social Constructivist Theories of Knowledge

Objectors on these grounds cite Kenneth Bruffee's argument (1983, 1984, 1993) that collaborative learning reflects a nonfoundational, social constructivist view of knowledge. Based on an epistemology derived from Richard Rorty, Thomas Kuhn, Clifford Geertz, Erving Goffman, and others, collaborative learning promotes, according to some of my colleagues, a dismaying philosophical relativism. Thus, Bruffee accepts as nonproblematic what he calls a nonfoundational view of knowledge, which "assumes that we construct and maintain knowledge not by examining the world but by negotiating with one another in communities of knowledgeable peers" (1993, p. 9). However, many of my own colleagues object to this view from a variety of empirical, idealist, and phenomenological perspectives.

My response here is that the philosophical relativism of collaborative learning depends on the way that teachers themselves regard their own knowledge. Certainly no practitioner of collaborative learning believes that the solutions generated by student groups are all equally valid. The purpose of the plenary sessions is to critique the novices' solutions according to the rules of argument in the discipline. The question is, does the teacher believe that the profession's solutions are also socially constructed? Bruffee apparently does, whereas many of my colleagues do not.

My own personal bent is to finesse this controversy by turning from the philosophical issues toward the pragmatic concern of what works in the classroom to teach critical thinking, and for me a goal-directed use of small groups works whether the teacher has a foundational or a nonfoundational view of knowledge. As a

pedagogical tool for teaching thinking, what is central to this approach to small groups is its consistent rhythm: the presentation of a teacher-designed problem, student practice at conducting an inquiry to solve the problem, and teacher critique of the students' performance. Such a teaching method does not depend on the teacher's endorsement of a Rortian view of knowledge.

It seems impossible, however, to avoid the political implications of collaborative learning, which does, I think, decenter the teacher. In a collaborative classroom, the teacher's arguments compete with arguments coming from various student groups. These arguments cannot simply be dismissed by an appeal to authority. The teacher must defend his or her views through the rules of reason. As a teaching method, collaborative learning is thus powerfully symbolic in conveying to students a view of academic life as rational dialogue rather than right answers dispensed by an authority.

Small Group Work Devalues Eccentricity and Teaches Social Conformity

According to these objections, the ideal of group consensus stifles creativity by forcing a leveling of talents. These objectors say that group work devalues the individuality of our potential artists, rebels, eccentrics, loners, and geniuses. From a Marxist perspective, collaborative learning is simply the latest example of how the colleges serve the needs of capitalists (Myers, 1986a). Today's business world no longer wants colleges to produce free-thinking individualists; it wants genial, cooperative team players. Thus, collaborative learning becomes the new fad among educators at the same time that the fiercely independent, cigar-chewing boss is being replaced by the committee and the team.

These objectors are right in asserting that some students work better individually than in groups. But unless we reject completely the goal of preparing students for careers after college, it would be unfortunate indeed if these individualistic students had no experience whatever working in groups. Given that teamwork and committee work are essential parts of professional life in America, even our most eccentric geniuses can benefit from collaborative learning, which can serve as a learning laboratory for problems students will face throughout their lives.

The other branch of this objection—that collaborative learning values consensus over difference—seems grounded in a false premise equating consensus with conformity. There is a qualitative difference between conformity—an easy and quick acquiescence to the first thesis produced by a group member—and a synthesis reached through dialectic conversation. In my own experience,

group work does not suppress eccentric and individualistic ideas but in fact gives them a chance to be aired and tested in group conversation. Often creative insights come from shy persons who would never venture their ideas in front of the teacher and the whole class. What I observe in small groups is a lot of genuine exploration, elaboration, and shifting of ideas. Collaborative learning, far from promoting conformity, gives students opportunities to flex their own muscles, to push against the teacher, to try out their own wings.

Conclusion: Some Additional Advantages of Small Groups _____

I have argued in this chapter that using small groups in the classroom can be a powerful form of active learning, giving students the opportunity to practice disciplinary inquiry and argumentation under the tutelage of a teacher as coach. Hillocks (1986) and others have demonstrated the effectiveness of the method in producing measurable advances in the quality of thinking reflected in student writing. In addition, it gives students space to pursue their own lines of thought and test them against the thinking of their professors.

In closing, I would like to mention the social advantages of collaborative learning—advantages that should not be lightly dismissed. These are the ways that collaborative learning promotes student interaction and friendships, develops leadership skills, and celebrates diversity. Students in a collaborative learning class get to know each other well. Groups meet outside of class for coffee or meals. They exchange phone numbers. They sign up together for classes in later terms. The significance of this interpersonal dimension became especially apparent to me when I opened a letter from a former student:

Of course, I've never forgotten the small-group work we students did in your . . . class two years ago, but now I can understand more clearly the value of that small-group work. Especially after spending a couple years in Japan and experiencing a certain "culture shock" upon my return to this country, I realized that there is a great lack of interpersonal trust in American society. . . . What strikes me now about the small-group work we did in your class is that it reinforces interpersonal trust, cooperation, sharing. . . . That kind of small-group work encourages people to be social beings and does much more than simply teach people how to revise a term paper. . . . I think that this trust-building dimension of small-group work should be its greatest selling point to school administrators, etc.

Another advantage of collaborative learning is the practice it gives in leadership, group interaction, and public speaking. Collab-

orative learning is particularly effective at increasing the leadership skills of female students and for getting male students used to turning to women for help in pressure situations.

Finally, collaborative learning takes advantage of the rich diversity of students at many of today's colleges and universities. In almost all of the collaborative groups I have established at my own university, traditionally aged American students have been integrated with international students and older students, many of whom bring fascinating, troubling life experiences to bear on issues related to the course. The opportunity to stimulate conversations of consequence among such diverse groups of people and to promote friendships among them is one of the joys of teaching through small groups.